

Notice of Allowability

Application No.

10/822,479

Examiner

Tatyana Zalukaeva

Applicant(s)

WENDLAND ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/12/2004.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 04/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S REASONS FOR ALLOWANCE

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Rewrite the abstract of the disclosure as follows:

-----Abstract

Photoiniferters for controlled radical polymerizations and telechelic copolymers comprising polymerized units of one or more free radically (co)polymerizable monomers having a first azalactone terminal group and a second dithiocarbamate terminal group are described.-----

In claim 1 line 3 of the claim replace the "an" ---- in front of the words "first azlactone terminal group" by ----a----.

Allowable Claims

2. Claims 1-11 are allowed over the prior art of record.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: the closest prior art of record is an article "Polyazlactones", Encyclopedia of Polymer Science and Engineering, (1988), pp. 558-570, Vol. 11 , 2-nd Edition, John Wiley and Sons

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(hereinafter referred to as Encyclopedia), S. M. HEILMANN, "Chemistry and Technology of z-Alkenyl Azlactones", Journal of Polymer Science: Pad A: Polymer Chemistry, (2001), pp. 3655-3677, Vol. 39, John Wiley and Sons, Inc. and "T. Doi, "Radical Polymerization of Methyl Acrylate by Use of Benzyl N N-Diethyldithiocarbamate in Combination with Tetraethylthiuram Disulfide as a Two-component Iniferter" , Journal of Polymer Science: Part A: Polymer Chemistry, (November 30, 1994). pp. 2911-2918, Vol. 32, No. 15, and U.S. Patent 6,680,362 and 6,677,413. Encyclopedia teaches azolactones used for production of polyazolactones, emphasizing that the class of azolactones was discovered in 1880s (page 559). Azolactone is presented as a starting compound of scheme 2 of page 558. However, Encyclopedia fails to disclose the group attached to a linking group Q, as defined by structure I in claim 1, and fails to disclose the use of these compounds as iniferters to produce telechelic polymers. Heilmann teaches the use of azlactones as iniferters for polymerization; Doi teaches the use of Benzyl N N-Diethyldithiocarbamate in Combination with Tetraethylthiuram Disulfide as a two-component Iniferter. However, none of the cited references alone or in combination suggests the telechelic polymer having two different terminal groups, namely azlactone group as the first terminal group and dithiocarbamate as the second terminal group.

No structure found in the Registry, Belstein or MARPAT files resembles any one of Applicants' structures presented by generic formula I in claim s 5 and 6 and specified as examples in the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tatyana Zalukaeva
Primary Examiner
Art Unit 1713

July 6, 2004

